

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method of switching fabric port mapping comprising:
~~associating line ingress queues with logical fabric ports;~~
~~broadcasting fabric specific broadcast control cells to all ports on all shelves attached to the switching fabric;~~
~~transmitting the broadcast control cells to each port on each of the shelves; and~~
~~forwarding the replicated broadcast control cells to all shelves attached to the switching fabric, wherein the broadcasts control cells contain the current switching logical to physical port mappings based on which packets in the line ingress queues are to be forwarded by the switching fabric.~~
2. (Currently Amended) The method of claim 1, wherein ~~the logical to physical port mappings include the mappings of the ports on the shelf which initiated the broadcasting~~~~the said mapping is accomplished without the mapping of physical fabric ports.~~
3. (Original) The method of claim 1, wherein the presence of a line card on a given fabric logical port is propagated to all other line cards in the system.
4. (Currently Amended) The method of claim 1, wherein ~~the tables of the logical to physical port mappings are updated by a fabric control cell mechanism.~~
5. (Currently Amended) The method of claim 4, wherein the fabric control cell mechanism immediately broadcasts ~~the-a change in~~ ~~the~~ logical to physical port mappings upon the failure of an active line card.
6. (Currently Amended) The method of claim 5, wherein the fabric control cells ~~mechanism~~ periodically broadcasts ~~the current logical to physical to logical port mappings.~~
7. (Original) The method of claim 6, wherein there are instances of multiple fabric control cell broadcasts ongoing.
8. (Original) The method of claim 7, wherein the broadcasts are controlled by shelf managers.

9. (Currently Amended) The method of claim 8, wherein the shelf managers periodically send out the broadcast control cells for all line card slots.

10. (Original) The method of claim 6, wherein the periodic broadcasts are made even when there is no card in a given slot.

11. (Currently Amended) A switching fabric port mapping apparatus comprising:
means for mapping associating logical fabric ports to line ingress queues to logical fabric ports; and
means for broadcasting the logical to physical port mappings based on which packets in the line ingress queues are to be forwarded by the switching fabric.

12. (Original) The apparatus of claim 11, wherein an output queue is associated with a logical destination port.

13. (Original) The apparatus of claim 11, wherein the logical fabric ports are globally managed.

14. (Currently Amended) The apparatus of claim 11, wherein the broadcasting is made to all ports on all shelves attached to the switching fabric and the logical to physical port mappings include the mappings of the ports on the shelf which initiated the broadcast
logical to physical fabric port mapping is managed locally.

15. (Currently Amended) A switching fabric port mapping apparatus comprising:
circuitry to associate line ingress queues to logical fabric ports
map logical fabric ports to line ingress queues; and
circuitry to broadcast logical to physical port the-mappings based on which packets in the line ingress queues are to be forwarded by the switching fabric.

16. (Currently Amended) The apparatus of claim 15, wherein the logical fabric ports are globally managed.

17. (Currently Amended) The apparatus of claim 15, wherein the broadcast is made to all ports on all shelves attached to the switching fabric and the logical to physical port mappings include the mappings of the ports on the shelf which initiated the broadcast
logical to physical port mapping is managed locally.

18. (Original) The apparatus of claim 15, wherein there are instances of multiple control cell broadcasts ongoing.

19. (Currently Amended) A machine-readable medium that provides instructions, which when executed by a machine causes the machine to perform operations comprising:

~~associating line ingress queues to logical fabric ports~~
~~mapping logical ports to line ingress queues;~~ and

~~broadcasting logical to physical port mappings based on which packets in the line ingress queues are forwarded~~
~~facilitating the said mapping locally.~~

20. (Currently Amended) A switching fabric port mapping system comprising:

a multi-shelf switching fabric;:
source line cards, each associated with a plurality of line ingress queues;

destination line cards; and
a broadcast control mechanism which facilitates-updates logical to physical port mappings;

wherein the said mapping is accomplished without the mapping of physical fabric ports.
packets in the line ingress queues are to be forwarded by the switching fabric based on the updated logical to physical mappings.

21. (Currently Amended) The system of claim 20, wherein afurther comprising redirecting of traffic is accomplished using a distributed broadcast mechanism to redirect traffic.

22. (Currently Amended) The system of claim 20, wherein the mappings is-are executed in a multi-shelf switching environment.

23. (Original) The system of claim 20, wherein mapping tables are updated by a fabric control cell mechanism.

24. (Original) A method of switching fabric port mapping comprising:
broadcasting fabric specific broadcast control cells;
transmitting the broadcast control cells to each port on each of the shelves;
terminating the broadcast control cells with a shelf processor;
updating a port mapping table on each shelf; and

mapping ingress queues to logical fabric ports instead of physical fabric ports based on updated port mapping tables;

wherein a shelf's logical to physical fabric port mapping is managed locally and it's mapping table updates are managed globally.

25. (Original) The method of claim 24, wherein the terminating is done by a processor located in a line card.

26. (Original) The method of claim 24, wherein a fabric control mechanism supports either 1 for 1 sparing or 1 for N sparing.

27. (New) The machine readable medium of claim 19 wherein the instructions cause the machine to broadcast to all ports on all shelves attached to the switching fabric, and wherein the broadcast logical to physical port mappings include the mappings of the ports on the shelf which initiated the broadcasting.